


Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/772,102
				Filing Date	February 4, 2004
				First Named Inventor	KUMAR
				Art Unit	Not Assigned
				Examiner Name	Not Assigned
				Attorney Docket Number	2950.21US02
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U.S. PATENT DOCUMENTS					
EXAMINER INITIAL [*]	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	
0		2,603,554	07/1952	Calbeck	
		2,610,154	09/1952	Brown, Jr.	
		2,854,413	09/1958	Geary	
		2,863,084	12/1958	Arnott et al.	
		2,898,191	08/1959	Conn et al.	
		2,968,627	02/1958	Wachtel	
		3,040,202	06/1962	Lehmann	
		3,131,025	04/1964	Carnall, Jr. et al.	
		3,260,879	07/1966	Feuer	
		3,406,228	10/1968	Hardy et al.	
		3,691,088	09/1972	Pelton	
		3,776,754	12/1973	Levinos	
		3,984,586	10/1976	Kawarada et al.	
		4,116,864	09/1978	Kagami et al.	
		4,172,920	10/1979	Kanda et al.	
	4,272,397	06/1981	Fukuda et al.		
	4,275,333	06/1981	Kagami et al.		
	4,340,839	07/1982	Fujita et al.		
	4,680,231	07/1987	Yamamura et al.		
FOREIGN PATENT DOCUMENTS					
EXAMINER INITIAL [*]	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T ⁶
0		WO 98/37165	08/1998	PCT	
		WO 99/23191	05/1999	PCT	
		WO 99/46204	09/1999	PCT	
		WO 99/50880	10/1999	PCT	
		WO 00/46867	08/2000	PCT	
		WO 00/54291	09/2000	PCT	
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Q		H429	02/1988	Harris et al.	
		4,738,798	04/1988	Mahler	
		4,808,398	02/1989	Heistand, II	
		4,842,832	06/1989	Inoue et al.	
		4,921,767	05/1990	Datta et al.	
		4,960,654	10/1990	Yoshinaka et al.	
		5,106,828	04/1992	Bhargava et al.	
		5,128,063	07/1992	Kamikubo	
		5,152,973	10/1992	Spencer	
		5,167,990	12/1992	Tono et al.	
		5,225,820	07/1993	Clerc	
		5,250,281	10/1993	Imai et al.	
		5,264,031	11/1993	Palmer et al.	
		5,390,276	02/1995	Tai et al.	
		5,418,062	05/1995	Budd	
		5,442,254	08/1995	Jaskie	
		5,447,708	09/1995	Helble et al.	
		5,455,489	10/1995	Bhargava	
	5,460,701	10/1995	Parker et al.		
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		5,498,369	03/1996	Bredol et al.	
		5,504,599	04/1996	Okibayashi et al.	
		5,527,519	06/1996	Miksits et al.	
		5,578,899	11/1996	Haven et al.	
		5,635,154	06/1997	Arai et al.	
		5,637,258	06/1997	Goldburt et al.	
		5,643,496	07/1997	Brese et al.	
		5,644,193	07/1997	Matsuda et al.	
		5,651,712	07/1997	Potter	
		5,699,035	12/1997	Ito et al.	
		5,770,113	06/1998	Iga et al.	
		5,893,999	04/1999	Tamatani et al.	
		5,952,125	09/1999	Bi et al.	
		5,952,665	09/1999	Bhargava	
		5,958,348	09/1999	Bi et al.	
		5,989,514	11/1999	Bi et al.	
		6,036,886	03/2000	Chhabra et al.	
		6,039,894	03/2000	Sanjurjo et al.	
		6,048,616	04/2000	Gallagher et al.	
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0		6,099,798	08/2000	Kambe et al.	
		6,180,029	01/2001	Hampden-Smith et al.	
		6,187,225	02/2001	Rao, Ravilisetty P.	
		6,193,908	02/2001	Hampden-Smith et al.	
		6,193,936	02/2001	Gardner et al.	
		6,210,604	04/2001	Hampden-Smith et al.	
		6,225,007	05/2001	Horne et al.	
		6,391,273	05/2002	Konrad et al.	
		6,391,494	05/2002	Reitz et al.	
		6,413,489	07/2002	Ying et al.	
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Q		Goldstein et al., Observation of Melting in 30A Diameter CdS NanoCrystals, Met. Res. Soc. Symp. Proc. Vol. 206, pp. 271-274, 1991			
Q		Curtin, The Field Emission Display: A New Flat Pane Technology, Conf. Rec. of the 1991 Int'l Display Res. Conf., pp. 12-15, October 1991			
Q		Tissue et al., Synthesis and Characterization of Metal-Oxide Nanocrystals Prepared by CO ₂ - Laser-Heated Vaporization/Condensation, Journal of the SID, Vol. 4(3), pp. 213-217, October 1996			
Q		Siegel, Creating Nanophase Materials, Scientific American, 2 pages, December 1996			
Q		J.S. Yoo et al., The Effects of Particle Size and Surface Recombination Rate on the Brightness of Low-Voltage Phosphor, J. App. Phys. 81(6), 2810-2813, March 15, 1997			
Q		El-Shall et al., Synthesis of Nanoparticles by a Laser Vaporization-Controlled Condensation Technique, SPIE, Vol. 3123, pp. 98-108, July 1997			
Q		Oshio et al., Firing Technique for Preparing a BaMgAl ₁₀ O ₁₇ :Eu ²⁺ Phosphor with Controlled Particle Shape and Size, Journal of the Electrochemical Society, 146(1), pp. 392-399, 1999			
Q		Konrad et al., Chemical Vapor Synthesis and Luminescence Properties of Nanocrystalline Cubic Y ₂ O ₃ :Eu, J. Appl. Phys., Vol. 86, No. 6, pp. 3129-3133, Sept. 15, 1999			
Q		J.S. Yoo et al., Spherical BaMgAl ₁₀ O ₁₇ :Eu ²⁺ Phosphor Prepared by Aerosol Pyrolysis Technique for PDP Applications, Journal of the Electrochemical Society, 148(9) H128-H131, 2001			
Q		Ramponi et al., "New Er-doped phosphate glass for ion-exchange active waveguides: accurate determination of the refraction index," Optical Materials, 14, pp. 292-296.			
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Q		Lee et al., "Controlled formation of nanoparticles utilizing laser irradiation in a flame and their characteristics," Applied Physics Letters, Vol. 79, No. 15, pp. 2459-2461, October 8, 2001.			
Q		Vermelho et al., "The influence of sodium ions on rare-earth solubility in silicon-silicon SiO ₂ -P ₂ O ₅ glass hosts fabricated by flame hydrolysis deposition," Proceedings of SPIE, Vol. 4277, pp. 381-387, 2001.			
Q		Ballato et al., "Fabrication of fibers with high rare-earth concentrations for Faraday isolator applications," Applied Optics, Vol. 34, No. 30, pp. 6848-6854, October 20, 1995.			
Q		Chemical Abstract citation: 127:196928: Photocalorimetric measurement of the quantum efficiencies of phosphors," Zachau, Journ. Luminesc. (1997), 72-74, 792-793.			
Q		Chemical Abstract citation 111:143246: "Europium-doped strontium aluminum oxide (2SrO 3Al ₂ O ₃) and barium calcium aluminum oxide (1.29(Ba,Ca)O,6Al ₂ O ₃). Two new blue emitting phosphors," Smets et al., Journ. Electrochem. Soc., (1989), 136(7), 2119-23.			
Q		Bender et al., "Synthesis and Fluorescence of Neodymium-Doped Barium Fluoride Nanoparticles," Chem. Mater., Vol. 12, No. 7, pp. 1969-1976, 2000.			
Q		Chemical Abstract citation 135:144231: Mechanism of thermal degradation of blue BaMgAl ₁₀ O ₁₇ :Eu (BAM) phosphor, Zhou et al., Faguang Xuebao (2000), 21, (4), 345-48.			
Q		Jean et al., "Spherical BaMgAl ₁₀ O ₁₇ :eu ²⁺ Phosphor Prepared by Aerosol Pyrolysis Technique for PDP Application," Jour. Electrochem. Soc., 149 (9), 2001, pp. H128-H131.			
Q		Chemical Abstract citation 132:327319: Blue emitting CaAl ₂ O ₄ :eu ²⁺ phosphors for PDP application, Tanaka et al. Journ. Lumines., (2000) 87-89, 1250-1253.			
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C		Chemical Abstract citation "Photoluminescence imaging of phosphor particles using near-field optical microscope with UV light excitation," Nishikawa et al. Jour. Microscopy, (1999), 194 (2/3), 415-420.			
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